



CALIFORNIA HIGH-SPEED RAIL AUTHORITY

## MEMORANDUM

**To:** Chairman Pringle and Authority Members

**Date:** August 28, 2009

**From:** Mehdi Morshed  
Executive Director

**Subject:** Agenda Item 8 – American Recovery and Reinvestment Act Grant Discussion

### BACKGROUND

A total of \$8 billion in federal stimulus funding is currently available through the High-Speed Intercity Passenger Rail (HSIPR) Program, designated for intercity and high-speed rail projects across the country. The 2009 HSIPR Act established four “tracks” as follows:

- Track 1 - Intercity Passenger Rail Project funded under American Recovery and Reinvestment Act (ARRA)
- Track 2 - High-Speed Intercity Passenger Rail Service Development Programs
- Track 3 - Service Planning Activities
- Track 4 - FY09 Appropriations Projects

California’s application for Track 1, 3 and 4 grants was submitted by the Governor on August 24, 2009, and totaled \$1.1 billion, focusing on improvements to existing passenger rail services and near-term job creation. In adherence to the federal requirements, Track 1, 3 and 4 applications were for improvements to existing passenger rail lines, including the integration of high-speed rail with intercity passenger service. California’s Track 1 application included \$400 million for the TransBay Terminal.

California’s Track 2 grant applications will encompass each section of the proposed high-speed rail route: Preliminary Engineering (PE) / completion of the EIS/EIR documents for each of the 10<sup>1</sup> sections, and Final Design and Construction of four sections (Los Angeles–Anaheim, Fresno–Bakersfield, Merced–Fresno, and San Francisco–San Jose).

This falls in line with the Pre-applications submitted in July 2009 by the Governor.

California’s Track 2 applications, which must be submitted by October 2, 2009, are currently being prepared by Authority staff and consultants for Board approval and submission to the Governor, who will be the final submitter to the federal government as he was with the rest of the State’s HSIPR grant applications.

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<sup>1</sup> Note: Nine of the sections are part of the statewide HSR system; the tenth is the Altamont Corridor Rail Project. Subsequent to the submittal of the HSIPR Track 2 Pre-Applications in July 2009, the Authority and FRA have agreed to split the Merced to Bakersfield section into two sections: Merced – Fresno and Fresno – Bakersfield.

## **TIMELINE**

The HSIPR Act established the following Track 2 Timeline:

- Pre-application and comment: July 10, 2009
- Application: October 2, 2009
- FRA Obligation/Letter of Intent (LOI): no later than Sept. 30, 2011
- Corridor Environmental Approval (ROD or FONSI): no later than Sept. 30 2011
- Begin construction: no later than Sept. 30, 2012
- Project Completion: no later than Sept. 30, 2017
- FRA Decisions on Award to Be Made: Unknown / the federal government has not indicated

## **TRACK 2 APPLICATION REQUIREMENTS**

Eligibility Requirement: A “Corridor Program is a group of projects that collectively advance the entirety or a ‘phase’ or ‘geographic section’ of a corridor service development plan.”

Applicant must submit a “Corridor Service Overview” as part of its application.

Applicants may choose to represent their vision for the entire, fully-developed, corridor service in one application, or in multiple “section” applications.

All applications must be able to demonstrate “independent utility” and measurable public benefits.

## **FRA EVALUATION CRITERIA<sup>2</sup>**

### *Public Return on Investment Criteria*

- Transportation benefits
- Economic recovery benefits
- Other public benefits

### *Project Success Factors*

- Project Management Approach
- Sustainability Benefits

### *Other Attributes*

- Timeliness of Project Completion
- FRA Selection Criteria

### *Balance and Diversity*

- Region/Location
- Innovation
- Partnerships
- Tracks and Round Timing

## **CHSRA PROGRAM PROPOSALS**

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<sup>2</sup> Note: FRA will make its evaluations and selections for HSIPR Track 2 funding based on the entire application rather than on component projects considered individually

Consistent with the pre-application submitted by the Governor, the staff and consultants have reviewed the corridors and found the following projects meet the requirements for inclusion in Track 2, particularly vis-à-vis the issue of “independent utility.” Ten CAHSRA Program proposals are currently being developed for Track 2 funding as follows:

***Preliminary Engineering (PE) - EIS/EIRs***

- Five sections of the proposed California statewide High-Speed Rail system –Merced–San Jose, Merced–Sacramento, Bakersfield–Palmdale, Palmdale–Los Angeles, and Los Angeles–San Diego – as well as the Altamont Corridor Rail Project.

***Design and Construction***

- Los Angeles–Anaheim Section
- Fresno–Bakersfield Section
- Merced–Fresno Section<sup>3</sup>
- San Francisco–San Jose Section

**PE/Environmental Review Applications**

Total funding of \$410 million (in 2009 dollars) will be required for Preliminary Engineering and completion of Project-Level EIS/EIR documents for the above five sections of the California High-Speed Rail (HSR) System and the Altamont Corridor Rail Project.

The Authority is preparing EIR/EIS documents to obtain an approved Notice of Determination (NOD) and Record of Decision (ROD) for each of the above ten sections comprising the entire 800-mile California HSR system

As part of the PE effort, the Authority is also in discussion with the Federal Railroad Administration (FRA) to facilitate a draft Rule of Particular Applicability and associated waivers by the summer of 2010 to enable construction bidding documents to appropriately reflect FRA requirements to operate trains at 220 mph.

**Final Design and Construction Applications**

For Final Design and Construction, the *Los Angeles – Anaheim, Fresno – Bakersfield, Merced – Fresno, and the San Francisco – San Jose* sections meet the requirements for inclusion in Track 2. The estimated final design and construction costs are based on the best current information; these costs are subject to change as more detail becomes available as part of the project environmental review and preliminary engineering studies.

***Los Angeles – Anaheim Section***

***Project:***

Construct the HSR infrastructure including track (but not electrification and other HSR “systems” elements) in this 30.1-mile segment that parallels the existing freight and passenger LOSSAN rail corridor

***Project includes:***

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<sup>3</sup> As noted above: Subsequent to the submittal of the HSIPR Track 2 Pre-Applications in July 2009, the Authority and FRA have agreed to split the Merced to Bakersfield section into two sections: Merced – Fresno and Fresno-Bakersfield.

- HSR facilities at Los Angeles Union Station (LAUS) and Anaheim Regional Transportation Intermodal Center (ARTIC).
- Right-of-way acquisition, grade-separations, utility relocation, environmental mitigation, earthwork, guideway structures, tunneling, trackwork, and a Terminal Layout/Storage & Maintenance Facility.

*Estimated Cost Summary*

Total Capital Cost: \$3.7 Billion (2009 dollars)

*Independent Utility*

HSR infrastructure would be used by Metrolink in the interim (or longer-term until Phase 1 HST system is completed) using higher-speed, lighter-weight trains

*Environmental Review*

FRA Record of Decision (ROD) is scheduled to be issued in April 2011 well in advance of the September 2011 ARRA mandate.

***Fresno-Bakersfield Section***

*Project:*

Construct HSR infrastructure including track but not the electrification and other HSR “systems” for up to 220-mph operation

*Project includes:*

- Relocation of BNSF track within their existing right-of-way (ROW) to make room for new HSR tracks to run generally adjacent to the freight tracks.
- Right-of-way acquisition, grade-separations, utility relocation, environmental mitigation, earthwork, guideway structures, and track.

*Proposed Route*

Approximately 98-miles long, from just south of the Fresno metropolitan area to an area just north of the Bakersfield metropolitan area. Includes work in the towns of Corcoran, Wasco, and Shafter. The alignment could accommodate a possible future Visalia/Tulare/Hanford station.

*Estimated Cost Summary*

Total Capital Cost: \$1.4 Billion (2009 dollars)

*Independent Utility*

Independent utility is provided by constructing approx. 98 miles of new high-speed double track between Fresno and Bakersfield, connecting to BNSF tracks at the north and south ends, providing a grade-separated, dedicated route for use by Amtrak if HSR-system implementation is delayed. Would greatly improve safety and trip time.

*Environmental Review*

- Authority is expediting environmental clearance (NOD/ROD) of this segment to Sept 2011
- Splitting NOI / NOP from Merced-Fresno segment will improve the environmental review process

***Merced – Fresno Section***

*Project:*

Construct HSR infrastructure including track but not electrification and other HSR “systems” for 220 mph operation in the 50-mile section between Merced and Fresno

*Project Assumptions:*

- HSR tracks would parallel the Union Pacific Railroad (UPRR) route and State Route (SR) 99
- Includes ROW acquisition adjacent to UPRR, grade separations, SR99 interchange modifications, utility relocation, environmental mitigation, earthwork, guideway structures, track

*Estimated Cost Summary*

Total Capital Cost: \$840 Million (2009 dollars)

*Independent Utility*

- Independent utility is provided by constructing approximately 50 miles of new high-speed double-track railroad between Merced and Fresno allowing connection into conventional rail passenger services at each end
- Undertaking the highway modifications and grade separations of the UPRR early in the CHST Project would provide immediate safety and traffic-flow benefits complimentary to Caltrans' "SR 99 Corridor Program" under the Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act of 2006

*Environmental Review*

- Authority is expediting environmental clearance (NOD/ROD) of this segment to Sept 2011
- Splitting NOI / NOP from Fresno-Bakersfield segment will improve the environmental review process

***San Francisco-San Jose Section***

Earlier this year, MTC in cooperation with other entities in the Bay Area proposed the following projects for inclusion in ARRA:

<b>MTC ARRA Investment Strategy Project List</b>	
<b>MTC Phase I Projects</b>	<b>2009 \$ (in millions)</b>
TransBay Terminal <sup>4</sup>	\$400
4 <sup>th</sup> and King (Phase I)	\$85
San Bruno Grade Separations	\$184
Corridor Electrification	\$552
Positive Train Control	\$200
Diridon Station Phase I	\$130
<b>Sub-total</b>	<b>\$1,551</b>

The following additional projects are required to complete the Caltrain and HST infrastructure including grade separations, track, electrification and systems to accommodate both Caltrain and the HST service<sup>5</sup>:

<b>Phase II San Francisco to San Jose Projects</b>	<b>2009 \$ (in millions)</b>
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<sup>4</sup> Note: The TBT application for \$400 M was submitted as part of the State's ARRA Track 1

<sup>5</sup> Note: the Authority and the FRA still have decisions to make regarding the TransBay Terminal and Diridon Station

Track	\$200
Earthwork	\$148
Structures/Cut & Cover/Walls	\$548
Bayshore to San Francisco Approach	\$785
Grade Separations	\$1,400
Rail/Utility Relocations	\$78
San Jose Station	\$18
Electrification	\$348
Environmental Review and Engineering	\$52
<b>Sub-total</b>	<b>\$3,577</b>

*Route Description*

Route will be co-located with Caltrain's Peninsula Commuter Rail Corridor between San Francisco and San Jose

*Assumptions*

- Transbay Transit Center costs have been submitted under the ARRA Track 1 by the Transbay Joint Powers Authority; no additional funding is being requested by the Authority under Track 2 pending decisions to be made by HSRA and FRA on this terminal station
- Positive Train Control, complying with FRA requirements, is included to facilitate the construction of HST infrastructure while maintaining Caltrain operations
- All ROW costs are excluded
- All intermediate station costs are excluded (Millbrae Station and an optional station at Redwood City or Palo Alto)

*Independent Utility*

- The Phase I projects will serve Caltrain immediately and are fully-compatible with the HST operational requirements.
- The Phase II funding continues the work begun under Phase I.

*Environmental Review*

FRA Record of Decision (ROD) is scheduled to be issued by the September 2011 ARRA mandate. The Phase I projects have already received FTA environmental approval, which should expedite the FRA approval.

## **DISCUSSION**

The preceding provides the Board with a comprehensive list of individual projects that can be included in the applications for Track 2 funding. The total cost of all those projects exceeds the funds available. California has submitted \$1.1 billion earlier. Assuming that no other state receives any funding, \$6.9 billion would be available. The Board should discuss and agree on the amount of funds it should apply for.

Additionally, the Board needs to discuss whether or not it wishes to provide state bond funds as matching money for federal funds, and if so, what percentage.

The Board also should consider providing instruction or guidelines as to what level of funding should be aimed for in each corridor.

## **RECOMMENDATIONS**

Based on the critical nature of the tasks ahead to complete a comprehensive, competitive and compelling list of projects to apply for, staff recommends the following:

Instruct the staff to prepare applications for the following:

- A. \$410 million for preliminary engineering and completion of environmental documents for the following five sections of the California High-Speed Rail system including Merced–San Jose, Merced–Sacramento, Bakersfield–Palmdale, Palmdale–Los Angeles, and Los Angeles–San Diego, and the Altamont Corridor Rail Project.
- B. Application(s) for engineering and construction between Los Angeles and Anaheim in the range of \$3 to \$4 billion.<sup>6</sup>
- C. Application(s) for engineering and construction between Bakersfield and Merced in the range of \$1.5 to \$2.5 billion.<sup>7</sup>
- D. Application(s) for engineering and construction between San Jose and San Francisco in the range of \$2.5 to \$4 billion.<sup>8</sup>
- E. For B, C, and D applications, offer to match federal dollars with state, local and/or private funds on a dollar-for-dollar basis.
- F. Staff prepare a proposed list of projects and applications for Board approval no later than September 20<sup>th</sup>.
- G. The Board, or a designated committee, review the staff recommendation and that the recommendations be approved by the Board not later than October 1.

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<sup>6</sup> Note: This application for design and construction will also include Preliminary Engineering and Environmental Review of this section.

<sup>7</sup> Note: This application for design and construction will also include Preliminary Engineering and Environmental Review of this section

<sup>8</sup> Note: This application for design and construction will also include Preliminary Engineering and Environmental Review of this section